

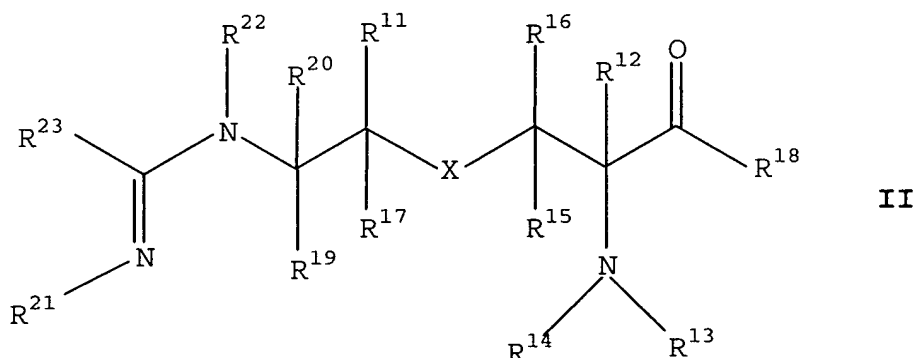
Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of the claims in the application:

Listing of Claims:

Claim 1 (previously presented) A method for the treatment of conditions or diseases of the gastrointestinal tract involving an overproduction of nitric oxide (NO) by inducible nitric oxide synthase (iNOS), in a subject in need of such treatment or prevention, said method comprising administering to the subject an anti-inflammatory effective amount of an inducible nitric oxide synthase selective inhibitor or pharmaceutically acceptable salt thereof or prodrug thereof, wherein the inducible nitric oxide synthase inhibitor is

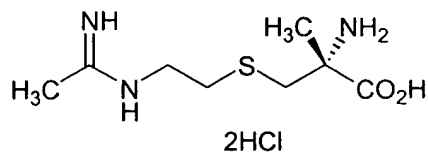
a compound having a structure corresponding to Formula II



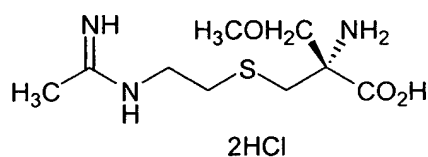
wherein X is selected from the group consisting of -S-, -S(O)-, and -S(O)<sub>2</sub>-, R<sup>12</sup> is selected from the group consisting of C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl, C<sub>1</sub>-C<sub>5</sub> alkoxy-C<sub>1</sub> alkyl, and C<sub>1</sub>-C<sub>5</sub> alkylthio-C<sub>1</sub> alkyl wherein each of these groups is optionally substituted by one or more substituent selected from the group consisting of -OH, alkoxy, and halogen, R<sup>18</sup> is selected from the group consisting of -OR<sup>24</sup> and -N(R<sup>25</sup>)(R<sup>26</sup>), and R<sup>13</sup> is selected from the group consisting of -H, -OH, -C(O)-R<sup>27</sup>, -C(O)-O-R<sup>28</sup>, and -C(O)-S-R<sup>29</sup>; or R<sup>18</sup> is -N(R<sup>30</sup>)-, and R<sup>13</sup> is -C(O)-, wherein R<sup>18</sup> and R<sup>13</sup> together with the atoms to which they are

attached form a ring; or  $R^{18}$  is -O-, and  $R^{13}$  is  $-C(R^{31})(R^{32})-$ , wherein  $R^{18}$  and  $R^{13}$  together with the atoms to which they are attached form a ring, wherein if  $R^{13}$  is  $-C(R^{31})(R^{32})-$ , then  $R^{14}$  is  $-C(O)-O-R^{33}$ ; otherwise  $R^{14}$  is -H,  $R^{11}$ ,  $R^{15}$ ,  $R^{16}$ , and  $R^{17}$  independently are selected from the group consisting of -H, halogen,  $C_1$ - $C_6$  alkyl,  $C_2$ - $C_6$  alkenyl,  $C_2$ - $C_6$  alkynyl, and  $C_1$ - $C_5$  alkoxy- $C_1$  alkyl,  $R^{19}$  and  $R^{20}$  independently are selected from the group consisting of -H,  $C_1$ - $C_6$  alkyl,  $C_2$ - $C_6$  alkenyl,  $C_2$ - $C_6$  alkynyl, and  $C_1$ - $C_5$  alkoxy- $C_1$  alkyl,  $R^{21}$  is selected from the group consisting of -H, -OH,  $-C(O)-O-R^{34}$ , and  $-C(O)-S-R^{35}$ , and  $R^{22}$  is selected from the group consisting of -H, -OH,  $-C(O)-O-R^{36}$ , and  $-C(O)-S-R^{37}$ ; or  $R^{21}$  is -O-, and  $R^{22}$  is  $-C(O)-$ , wherein  $R^{21}$  and  $R^{22}$  together with the atoms to which they are attached form a ring; or  $R^{21}$  is  $-C(O)-$ , and  $R^{22}$  is -O-, wherein  $R^{21}$  and  $R^{22}$  together with the atoms to which they are attached form a ring,  $R^{23}$  is  $C_1$  alkyl,  $R^{24}$  is selected from the group consisting of -H and  $C_1$ - $C_6$  alkyl, wherein when  $R^{24}$  is  $C_1$ - $C_6$  alkyl,  $R^{24}$  is optionally substituted by one or more moieties selected from the group consisting of cycloalkyl, heterocyclyl, aryl, and heteroaryl,  $R^{25}$  is selected from the group consisting of -H, alkyl, and alkoxy, and  $R^{26}$  is selected from the group consisting of -H, -OH, alkyl, alkoxy,  $-C(O)-R^{38}$ ,  $-C(O)-O-R^{39}$ , and  $-C(O)-S-R^{40}$ ; wherein when  $R^{25}$  and  $R^{26}$  independently are alkyl or alkoxy,  $R^{25}$  and  $R^{26}$  independently are optionally substituted with one or more moieties selected from the group consisting of cycloalkyl, heterocyclyl, aryl, and heteroaryl; or  $R^{25}$  is -H; and  $R^{26}$  is selected from the group consisting of cycloalkyl, heterocyclyl, aryl, and heteroaryl,  $R^{27}$ ,  $R^{28}$ ,  $R^{29}$ ,  $R^{30}$ ,  $R^{31}$ ,  $R^{32}$ ,  $R^{33}$ ,  $R^{34}$ ,  $R^{35}$ ,  $R^{36}$ ,  $R^{37}$ ,  $R^{38}$ ,  $R^{39}$ , and  $R^{40}$  independently are selected from the group consisting of -H and alkyl, wherein alkyl is optionally substituted by one or more moieties selected from the group consisting of cycloalkyl, heterocyclyl, aryl, and heteroaryl, wherein when any of  $R^{11}$ ,  $R^{12}$ ,  $R^{13}$ ,  $R^{14}$ ,  $R^{15}$ ,  $R^{16}$ ,  $R^{17}$ ,  $R^{18}$ ,  $R^{19}$ ,  $R^{20}$ ,  $R^{21}$ ,  $R^{22}$ ,  $R^{23}$ ,  $R^{24}$ ,  $R^{25}$ ,  $R^{26}$ ,  $R^{27}$ ,  $R^{28}$ ,  $R^{29}$ ,  $R^{30}$ ,  $R^{31}$ ,  $R^{32}$ ,  $R^{33}$ ,  $R^{34}$ ,  $R^{35}$ ,  $R^{36}$ ,  $R^{37}$ ,  $R^{38}$ ,  $R^{39}$ , and  $R^{40}$  independently is a moiety selected from the group consisting of alkyl, alkenyl, alkynyl, alkoxy, alkylthio, cycloalkyl, heterocyclyl, aryl, and heteroaryl, then the moiety is optionally substituted by one or more substituent selected from the group consisting of -OH, alkoxy, and halogen;

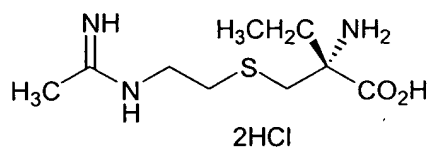
and wherein the compound is selected from the group consisting of:



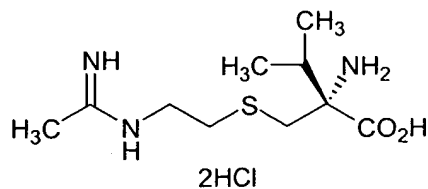
S-[2-[(1-iminoethyl)amino]ethyl]-2-methyl-L-cysteine, dihydrochloride;



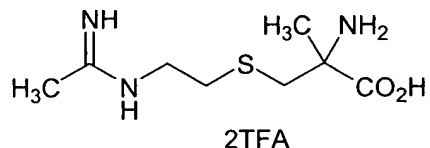
2-[[[2-[(1-iminoethyl)amino]ethyl]thio]methyl]-O-methyl-D-serine, dihydrochloride;



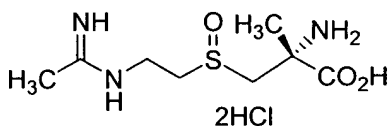
S-[2-[(1-iminoethyl)amino]ethyl]-2-ethyl-L-cysteine, dihydrochloride;



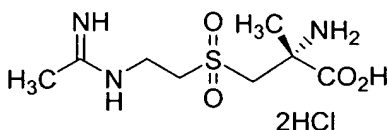
2-[[[2-(1-iminoethyl)amino]ethyl]thio]methyl]-D-valine, dihydrochloride;



S-[2-(1-iminoethylamino)ethyl]-2-methyl-(D/L)-cysteine, bistrifluoroacetate;



(2*R*)-2-Amino-3[[2-[(1-iminoethyl)amino]ethyl]sulfinyl]-2-methylpropanoic acid,  
dihydrochloride; and



(2*R*)-2-Amino-3[[2-[(1-iminoethyl)amino]ethyl]sulfonyl]-2-methylpropanoic acid  
dihydrochloride,

or a pharmaceutically acceptable salt or prodrug of any of said inducible nitric  
oxide synthase inhibitors.

Claim 2 (original) The method of claim 1 wherein the condition or  
disease of the gastrointestinal tract is selected from the group consisting of  
inflammatory bowel disease, Crohn's disease, ulcerative colitis, peptic ulcer

disease, gastric ulceration, duodenal ulceration, gastritis, ileitis, gastroesophageal reflux disease, irritable bowel syndrome, paralytic ileus and diarrhea.

Claim 3 (original) The method of claim 1 wherein the condition or disease of the gastrointestinal tract is inflammatory bowel disease.

Claim 4 (original) The method of claim 1 wherein the condition or disease of the gastrointestinal tract is Crohn's disease.

Claim 5 (original) The method of claim 1 wherein the condition or disease of the gastrointestinal tract is ulcerative colitis.

Claim 6 (original) The method of claim 1 wherein the condition or disease of the gastrointestinal tract is gastritis.

Claim 7 (original) The method of claim 1 wherein the condition or disease of the gastrointestinal tract is ileitis.

Claim 8 (original) The method of claim 1 wherein the condition or disease of the gastrointestinal tract is peptic ulceration.

Claim 9 (original) The method of claim 8 wherein the condition or disease of the gastrointestinal tract is gastric ulceration.

Claim 10 (original) The method of claim 8 wherein the condition or disease of the gastrointestinal tract is duodenal ulceration.

Claim 11 (original) The method of claim 1 wherein the condition or disease of the gastrointestinal tract is esophagitis.

Claim 12 (original) The method of claim 1 wherein the condition or disease of the gastrointestinal tract is gastroesophageal reflux disease.

Claim 13 (original) The method of claim 1 wherein the condition or disease of the gastrointestinal tract is irritable bowel syndrome.

Claim 14 (original) The method of Claim 1 wherein the condition or disease of the gastrointestinal tract is selected from group consisting of peptic ulcer disease and gastritis, said method further comprising administering to the subject an amount of an antimicrobial compound or pharmaceutically acceptable salt thereof or prodrug thereof, wherein the amount of the inducible nitric oxide synthase selective inhibitor and the amount of the antimicrobial compound together constitute an amount effective against the condition or disease of the gastrointestinal tract.

Claim 15 (original) The method of Claim 14 wherein the antimicrobial compound comprises an antibiotic compound.

Claim 16 (original) The method of Claim 14 wherein the antimicrobial compound comprises at least one compound selected from the group consisting of the following: amoxicillin, clarithromycin, rifabutin, bismuth subsalicylate, metronidazole, and tetracycline.

Claim 17 (original) The method of Claim 1 further comprising administering to the subject an amount of an antisecretory compound or pharmaceutically acceptable salt thereof or prodrug thereof, wherein the amount of the inducible nitric oxide synthase selective inhibitor and the amount of the antisecretory compound together constitute an amount effective against the condition or disease of the gastrointestinal tract.<sup>1</sup>

Claim 18 (original) The method of Claim 17 wherein the antisecretory compound comprises a proton-pump inhibitor.

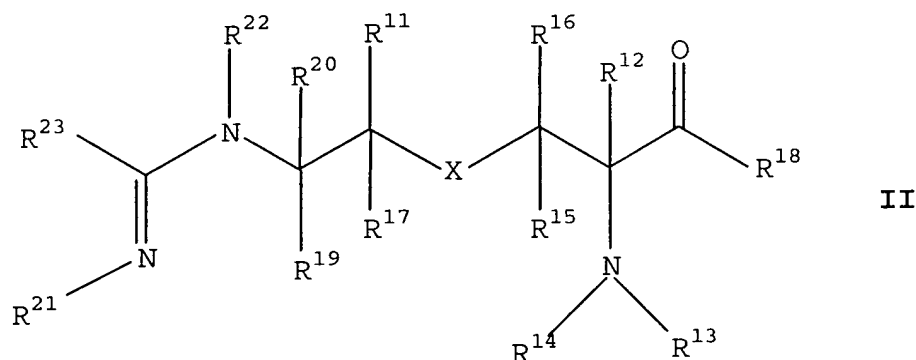
Claim 19 (original) The method of Claim 17 wherein the antisecretory compound comprises omeprazole.

Claim 20 (original) The method of Claim 17 wherein the antisecretory compound comprises an H<sub>2</sub>-receptor antagonist.

Claim 21 (original) The method of Claim 20 wherein the antisecretory compound comprises ranitidine.

Claim 22. (currently amended) A method for the treatment of inflammatory conditions or diseases of the gastrointestinal tract involving an overproduction of nitric oxide (NO) by inducible nitric (iNOS) and microbial infection, in a subject in need of such treatment ~~or prevention~~, said method comprising administering to the subject an amount of an inducible nitric oxide synthase selective inhibitor or pharmaceutically acceptable salt thereof or prodrug thereof, and an amount of an antimicrobial compound or pharmaceutically acceptable salt thereof or prodrug thereof, wherein the amount of the inducible nitric oxide synthase selective inhibitor and the amount of the antibiotic compound together constitute an amount effective against the condition or disease of the gastrointestinal tract, wherein the inducible nitric oxide synthase inhibitor is

a compound having a structure corresponding to Formula II

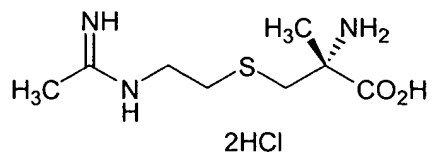


wherein X is selected from the group consisting of -S-, -S(O)-, and -S(O)<sub>2</sub>-, R<sup>12</sup> is selected from the group consisting of C<sub>1</sub>-C<sub>6</sub> alkyl, C<sub>2</sub>-C<sub>6</sub> alkenyl, C<sub>2</sub>-C<sub>6</sub> alkynyl, C<sub>1</sub>-C<sub>5</sub> alkoxy-C<sub>1</sub> alkyl, and C<sub>1</sub>-C<sub>5</sub> alkylthio-C<sub>1</sub> alkyl wherein each of these groups is optionally substituted by one or more substituent selected from the group consisting of -OH, alkoxy, and halogen, R<sup>18</sup> is selected from the group consisting of -OR<sup>24</sup> and -N(R<sup>25</sup>)(R<sup>26</sup>), and R<sup>13</sup> is selected from the group consisting of -H, -OH, -C(O)-R<sup>27</sup>, -C(O)-O-R<sup>28</sup>, and -C(O)-S-R<sup>29</sup>, or R<sup>18</sup> is -N(R<sup>30</sup>)-, and R<sup>13</sup> is -C(O)-, wherein R<sup>18</sup> and R<sup>13</sup> together with the atoms to which they are

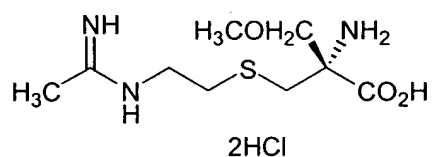
attached form a ring; or  $R^{18}$  is -O-, and  $R^{13}$  is  $-C(R^{31})(R^{32})-$ , wherein  $R^{18}$  and  $R^{13}$  together with the atoms to which they are attached form a ring, wherein if  $R^{13}$  is  $-C(R^{31})(R^{32})-$ , then  $R^{14}$  is  $-C(O)-O-R^{33}$ ; otherwise  $R^{14}$  is -H,  $R^{11}$ ,  $R^{15}$ ,  $R^{16}$ , and  $R^{17}$  independently are selected from the group consisting of -H, halogen,  $C_1$ - $C_6$  alkyl,  $C_2$ - $C_6$  alkenyl,  $C_2$ - $C_6$  alkynyl, and  $C_1$ - $C_5$  alkoxy- $C_1$  alkyl,  $R^{19}$  and  $R^{20}$  independently are selected from the group consisting of -H,  $C_1$ - $C_6$  alkyl,  $C_2$ - $C_6$  alkenyl,  $C_2$ - $C_6$  alkynyl, and  $C_1$ - $C_5$  alkoxy- $C_1$  alkyl,  $R^{21}$  is selected from the group consisting of -H, -OH,  $-C(O)-O-R^{34}$ , and  $-C(O)-S-R^{35}$ , and  $R^{22}$  is selected from the group consisting of -H, -OH,  $-C(O)-O-R^{36}$ , and  $-C(O)-S-R^{37}$ ; or  $R^{21}$  is -O-, and  $R^{22}$  is  $-C(O)-$ , wherein  $R^{21}$  and  $R^{22}$  together with the atoms to which they are attached form a ring; or  $R^{21}$  is  $-C(O)-$ , and  $R^{22}$  is -O-, wherein  $R^{21}$  and  $R^{22}$  together with the atoms to which they are attached form a ring,  $R^{23}$  is  $C_1$  alkyl,  $R^{24}$  is selected from the group consisting of -H and  $C_1$ - $C_6$  alkyl, wherein when  $R^{24}$  is  $C_1$ - $C_6$  alkyl,  $R^{24}$  is optionally substituted by one or more moieties selected from the group consisting of cycloalkyl, heterocyclyl, aryl, and heteroaryl,  $R^{25}$  is selected from the group consisting of -H, alkyl, and alkoxy, and  $R^{26}$  is selected from the group consisting of -H, -OH, alkyl, alkoxy,  $-C(O)-R^{38}$ ,  $-C(O)-O-R^{39}$ , and  $-C(O)-S-R^{40}$ ; wherein when  $R^{25}$  and  $R^{26}$  independently are alkyl or alkoxy,  $R^{25}$  and  $R^{26}$  independently are optionally substituted with one or more moieties selected from the group consisting of cycloalkyl, heterocyclyl, aryl, and heteroaryl; or  $R^{25}$  is -H; and  $R^{26}$  is selected from the group consisting of cycloalkyl, heterocyclyl, aryl, and heteroaryl,  $R^{27}$ ,  $R^{28}$ ,  $R^{29}$ ,  $R^{30}$ ,  $R^{31}$ ,  $R^{32}$ ,  $R^{33}$ ,  $R^{34}$ ,  $R^{35}$ ,  $R^{36}$ ,  $R^{37}$ ,  $R^{38}$ ,  $R^{39}$ , and  $R^{40}$  independently are selected from the group consisting of -H and alkyl, wherein alkyl is optionally substituted by one or more moieties selected from the group consisting of cycloalkyl, heterocyclyl, aryl, and heteroaryl, wherein when any of  $R^{11}$ ,  $R^{12}$ ,  $R^{13}$ ,  $R^{14}$ ,  $R^{15}$ ,  $R^{16}$ ,  $R^{17}$ ,  $R^{18}$ ,  $R^{19}$ ,  $R^{20}$ ,  $R^{21}$ ,  $R^{22}$ ,  $R^{23}$ ,  $R^{24}$ ,  $R^{25}$ ,  $R^{26}$ ,  $R^{27}$ ,  $R^{28}$ ,  $R^{29}$ ,  $R^{30}$ ,  $R^{31}$ ,  $R^{32}$ ,  $R^{33}$ ,  $R^{34}$ ,  $R^{35}$ ,  $R^{36}$ ,  $R^{37}$ ,  $R^{38}$ ,  $R^{39}$ , and  $R^{40}$  independently is a moiety selected from the group consisting of alkyl, alkenyl, alkynyl, alkoxy, alkylthio, cycloalkyl, heterocyclyl, aryl, and heteroaryl, then the moiety is optionally substituted by one or more substituent selected from the group consisting of -OH, alkoxy, and halogen;



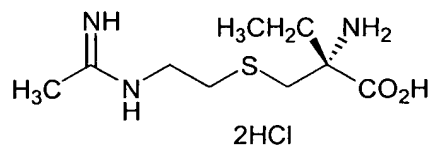
and wherein the compound is selected from the group consisting of:



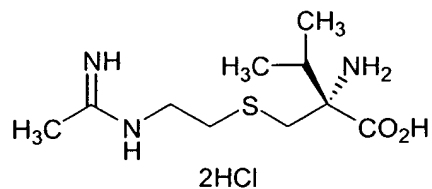
S-[2-[(1-iminoethyl)amino]ethyl]-2-methyl-L-cysteine, dihydrochloride;



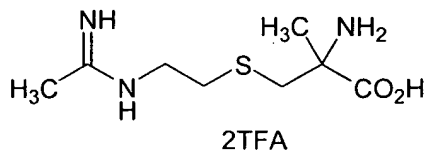
2-[[[2-[(1-iminoethyl)amino]ethyl]thio]methyl]-O-methyl-D-serine, dihydrochloride;



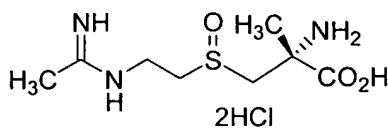
S-[2-[(1-iminoethyl)amino]ethyl]-2-ethyl-L-cysteine, dihydrochloride;



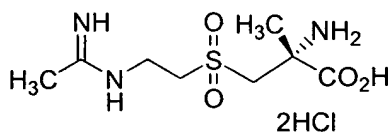
2-[[[2-(1-iminoethyl)amino]ethyl]thio]methyl]-D-valine, dihydrochloride;



S-[2-(1-iminoethylamino)ethyl]-2-methyl-(D/L)-cysteine, bistrifluoroacetate;



(2*R*)-2-Amino-3[[2-[(1-iminoethyl)amino]ethyl]sulfinyl]-2-methylpropanoic acid,  
 dihydrochloride; and



(2*R*)-2-Amino-3[[2-[(1-iminoethyl)amino]ethyl]sulfonyl]-2-methylpropanoic acid  
 dihydrochloride,

or a pharmaceutically acceptable salt or prodrug of any of said inducible nitric  
 oxide synthase inhibitors.

Claim 23. (original) The method of Claim 22 wherein the antimicrobial compound comprises an antibiotic compound.

Claim 24 (original) The method of Claim 22 wherein the antimicrobial compound comprises at least one compound selected from the group consisting of the following: amoxicillin, clarithromycin, rifabutin, bismuth subsalicylate, metronidazole, and tetracycline.

Claim 25 (original) The method of Claim 22 further comprising administering to the subject an amount of an antisecretory compound or pharmaceutically acceptable salt thereof or prodrug thereof, wherein the amount of the inducible nitric oxide synthase selective inhibitor, the amount of the antibiotic compound and the amount of the antisecretory compound together constitute an amount effective against the condition or disease of the gastrointestinal tract.

Claim 26 (original) The method of Claim 25 wherein the antisecretory compound comprises a proton-pump inhibitor.

Claim 27 (original) The method of Claim 26 wherein the antisecretory compound comprises omeprazole.

Claim 28 (original) The method of Claim 25 wherein the antisecretory compound comprises an H<sub>2</sub> receptor antagonist.

Claim 29 (original) The method of Claim 28 wherein the antisecretory compound comprises ranitidine.

Claim 30. (original) The method of Claim 22 wherein the antimicrobial compound comprises a double anti-microbial composition consisting of a combination of two compounds selected from the group consisting of the following: amoxicillin, clarithromycin, rifabutin, bismuth subsalicylate, metronidazole, and tetracycline.

Claim 31 (original) The method of Claim 22 wherein the condition or disease of the gastrointestinal tract is selected from the group consisting of inflammatory bowel disease, Crohn's disease, ulcerative colitis, peptic ulcer disease, gastric ulceration, duodenal ulceration, esophagitis, gastritis, ileitis,

colitis, gastroesophageal reflux disease, irritable bowel syndrome, irritable bowel syndrome, paralytic ileus and diarrhea.

Claim 32 (original) The method of Claim 22 wherein the condition or disease of the gastrointestinal tract is inflammatory bowel disease.

Claim 33 (original) The method of claim 22 wherein the condition or disease of the gastrointestinal tract is Crohn's disease.

Claim 34 (original) The method of claim 22 wherein the condition or disease of the gastrointestinal tract is ulcerative colitis.

Claim 35 (original) The method of claim 22 wherein the condition or disease of the gastrointestinal tract is peptic ulcer disease.

Claim 36. (original) The method of claim 35 wherein the condition or disease of the gastrointestinal tract is gastric ulceration.

Claim 37 (previously presented) The method of claim 22 wherein the condition or disease of the gastrointestinal tract is duodenal ulceration.

Claim 38 (original) The method of claim 22 wherein the condition or disease of the gastrointestinal tract is gastritis.

Claim 39 (original) The method of claim 22 wherein the condition or disease of the gastrointestinal tract is ileitis.

Claim 40 (original) The method of claim 22 wherein the condition or disease of the gastrointestinal tract is colitis.

Claim 41 (original) The method of claim 22 wherein the condition or disease of the gastrointestinal tract is esophagitis.

Claim 42 (original) The method of claim 22 wherein the condition or disease of the gastrointestinal tract is gastroesophageal reflux disease.

Claim 43 (original) The method of claim 22 wherein the condition or disease of the gastrointestinal tract is irritable bowel syndrome.